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EXAMINER

PIERCE, JEREMY R

ART UNIT

PAPER NUMBER

1771

DATE MAILED: 02/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/743,300

Applicant(s)

BECKER ET AL.

Examiner

Jeremy R. Pierce

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-24 is/are pending in the application.
- 4a) Of the above claim(s) 8-13 and 18-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 14-17 and 21-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7. 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Amendment B has been filed on December 19, 2002 as Paper No. 6. Claims 1-5, 7, 8, and 13-17 have been amended. Claim 6 has been cancelled. New claims 21-24 have been added. The amendment is sufficient to overcome the 35 USC 112 and 103 rejections set forth in the last Office Action. Claims 8-13 and 18-20 are not considered further on the merits as being drawn to a non-elected invention.

Election/Restrictions

2. Applicant's election with traverse of claims 1-7 and 14-17 in Paper No. 6 is acknowledged. The traversal is on the ground(s) that product and process claims are so closely linked that a search for the subject matter in the two groups could be carried out concomitantly. This is not found persuasive because Lack of Unity rules for 371 Applications dictate that restriction is proper when the special technical feature shared among the claims is not a contribution over the prior art. Since the coating material is obvious over the Kummermehr reference, it is not a contribution over the prior art.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-5, 7, 14-17, and 21-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims recite the mineral wool product is "acoustically transparent." What does it mean to be acoustically transparent?

Claim 15 is dependent upon claim 6, which is now a cancelled claim. The Examiner will assume that claim 15 should depend from claim 1.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3, 7, 15-17, and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kummermehr (WO 95/13252, English translation provided) in view of Seitz (U.K. Patent No. 2,032,845).

Kummermehr discloses a mineral wool product coated with a foamed siliceous material containing one organic plastic (page 1). Kummermehr does not disclose a fiber mat layer between the mineral wool and the coating. Seitz discloses two layers of mineral wool, such as rock wool and glass wool (Abstract). Seitz teaches the addition of a glass wool layer makes insulating material with a higher rigidity and lower density (page 1, lines 58-61). It would have been obvious to one having ordinary skill in the art

to include another layer of mineral wool, such as glass wool, in the mineral wool product of Kummermehr in order to increase rigidity and insulating properties, as taught by Seitz. With regard to claim 2, Kummermehr discloses the claimed ranges for the material in the coating (page 9), with the exception of aluminum hydroxide, which in the examples, is disclosed as being present in as much as 13% by weight (page 11). However, Kummermehr discloses that aluminum hydroxide is a flame protection agent (page 11). Kummermehr also discloses that flame protection agents can be added as needed (page 6). It would have been obvious to one having ordinary skill in the art to only add 1-5% aluminum hydroxide to the coating, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. With regard to claim 3, Seitz add a glass wool mat to a mineral wool (Abstract). With regard to claim 7, neither Kummermehr nor Seitz disclose basis weights for the fibrous mats. However, insulation mats of glass wool typically fall within Applicant's claimed range of 20 to 150 grams per square meter. If not already inherent, it would have been obvious to one having ordinary skill in the art to use a fibrous mat with a weight between 20 and 150 grams per square meter in order to have a material with sufficient insulation properties, since it has been held that discovering the optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). With regard to claim 15, there is no disclosure as to the preferred foaming agent used to foam the coating. It would have been obvious to one having ordinary skill in the art to use expanded graphite or pentaerythritol as the

foaming agent in the silica resin, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. With regard to claims 16 and 17, similar reasoning applies to the more limited weight limitations. With regard to claim 21, insulation is commonly used as ceiling panels. With regard to claim 22, Kummermehr discloses the foamed coating is applied through drying (pages 4-5). With regard to claim 23, Kummermehr discloses the coating applied in a quantity of 100 grams per square meter (claim 8). With regard to claim 24, Kummermehr do not disclose the foam weight per liter. Given that the foam is made of similar materials with similar amounts in Kummermehr as the present claims, the value of foam weight per liter would likely be inherent to the material of Kummermehr as well. If not, it would have been obvious to a person having ordinary skill in the art to use a weight per liter of 100 g/l to 400 g/l for the foam in order to obtain the desired density for insulation purposes.

7. Claims 4, 5, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kummermehr in view of Seitz as set forth above and further in view of Berbeco (U.S. Patent No. 4,301,040).

Kummermehr and Seitz do not teach adding electrically conductive or magnetically active material to the coating. Berbeco discloses resinous foam layers can be made anti-static by incorporating graphite fibers (column 3, lines 28-50). It would have been obvious to one having ordinary skill in the art to add graphite fibers to the

siliceous resin of Kummermehr in order to provide an acoustic insulation material that is static-resistant.

Response to Arguments

8. Applicant's arguments filed in Paper No. 6 have been fully considered but they are not persuasive.
9. In response to applicant's arguments, the recitation "acoustically transparent" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Furthermore, "acoustically transparent" is indefinite because it is not clear what that limitation is supposed to mean.
10. Applicant argues that the coating composition in Kummermehr is different from that of the present application. While Kummermehr may use slightly more amounts of aluminum hydroxide in the examples than Applicant claims, Kummermehr clearly state in the specification that such an ingredient is added in an as needed basis (page 6), and therefore, the amount of 1-5% by weight of aluminum hydroxide is not patentable over Kummermehr. All other ingredient amounts overlap each other in some manner, and

slight adjustments in the amount of plastic dispersion would not make a patentable difference in the absence of unexpected results.


Conclusion


11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: U.S. Patent No. 5,879,793 to Kummermehr and U.S. Patent No. 3,690,822 to Myers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy R. Pierce whose telephone number is (703) 605-4243. The examiner can normally be reached on Monday-Thursday 7-4:30 and alternate Fridays 7-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.


Jeremy R. Pierce
Examiner
Art Unit 1771


ELIZABETH M. COLE
PRIMARY EXAMINER

February 6, 2003